

Via electronic mail: Council@des.wa.gov

Washington State Building Code Council
1500 Jefferson St. S.E.
Olympia, WA 98501

October 14, 2022

Dear Washington State Building Code Councilmembers,

PSE appreciates the opportunity to provide comments on the Proposed Residential Energy Code (“Proposed Code”). We support increasing energy efficiency in Washington and the flexibility provided by the technology-neutral approach to heat pumps for space and water heating in the Proposed Code.

PSE is Washington State’s oldest and largest investor-owned energy utility, serving over 1.1 million electric and over 850,000 natural gas customers with safe and reliable energy services. In January 2021, PSE announced an aspirational goal to be a Beyond Net Zero Carbon company by 2045, with an interim target of a 30% emissions reduction by 2030.¹ PSE also actively supported landmark decarbonization legislation in Washington State, such as the Climate Commitment Act (“CCA”) and the Clean Energy Transformation Act (“CETA”). PSE recognizes that robust and thoughtful legislative policy is needed to achieve our ambitious decarbonization goals while minimizing unintended consequences, particularly for Washington’s most vulnerable residents. By 2025, 63 percent of PSE’s fuel mix will be supplied by clean energy sources.

PSE’s proposed pathway to decarbonize our entire energy supply envisions:

- Decarbonizing our electric supply through the addition of clean energy sources to reach carbon-neutral electricity by 2030 and 100% clean electricity by 2045;
- Maximizing energy efficiency both on the gas and electric side, which PSE and our customers have decades of experience in;
- Reducing the overall use of natural gas by encouraging customers to use hybrid heating systems in their homes—this technology, known as a dual fuel heat (or “hybrid”) pump, is simply an electric heat pump that takes care of most home heating needs, coupled with a furnace that runs during the coldest weather. The systems are complementary and work together to reduce overall gas use while maintaining reliability during periods of peak

¹ Puget Sound Energy, Pathway to Beyond Net Zero Carbon by 2045, (Jan. 2021), available for download at <https://www.pse.com/en/press-release/details/pse-sets-beyond-net-zero-carbon-goal>.

demand. With the rapid increase in electricity usage, hybrid systems could play a vital role in decarbonizing while ensuring reliability and stability of the electric system. Based on our climate, we anticipate the average home would use 70-90% less gas with these systems. We plan to study this in more detail and validate this factor through a pilot targeted electrification project in 2022-2023;

- Decarbonizing the gas supply through the use of clean alternative fuels—including Renewable Natural Gas (“RNG”) today and will likely include other fuels such as hydrogen in the future; and
- Leveraging our existing infrastructure, including the pipeline delivery system; and
- Rigorously studying the economic impacts of decarbonization on residents of Washington State, prioritizing low-income and historically marginalized communities.

Recently, PSE partnered with E3, a respected energy industry consultancy, to conduct a rigorous analysis on multiple decarbonization pathways, including full electrification and hybrid electrification. Through this study, PSE has concluded that we can reduce our carbon emissions faster, at a lower cost, and without compromising electric reliability through a hybrid approach that combines targeted electrification with leveraging the pipeline delivery system. The Proposed Code’s allowance hybrid heat pumps aligns with PSE’s analysis of the most cost-effective pathway to statewide decarbonization. While committed to decarbonization, PSE remains concerned about accurately understanding the economic impacts on consumers. As such, we encourage the SBCC to further study the economic and equity impacts of the proposed codes, with a priority on the most vulnerable communities.

Similarly, the Electric Power Research Institute’s January 2022 *Seattle City Light Electrification Assessment* concluded that the use of dual-fuel heating options “can also greatly help limit impacts on system peak,” which is expected to significantly increase without peak mitigation strategies.² Specifically, the assessment found that dual-fuel heating options can lessen the impacts of peak demand due to temperature, “which may vary greatly, depending on the future technology mix.”³ Thus, dual fuel heat pumps are also an important technology that will support energy reliability and stability. PSE appreciates the Proposed Code’s promotion of this technology.

Finally, PSE supports reducing the emission factor for electricity from 0.80 lb CO₂e/kWh to 0.44 lb CO₂e/kWh to reflect the future emission reductions that electric utilities will achieve under the Clean Energy Transformation Act. PSE encourages the Council to similarly adjust the emission factor for gas, as gas utilities must reduce the carbon intensity of the gas they deliver

² Electric Power Research Institute, *Seattle City Light Electrification Assessment*, ix (Jan. 2022), <https://powerlines.seattle.gov/wp-content/uploads/sites/17/2022/01/Seattle-City-Light-Electrification-Assessment.pdf>.

³ *Id.* at 1-8.

under the Climate Commitment Act. Already, PSE is delivering RNG produced by Klickitat Public Utility District at the H.W. Hill Renewable Natural Gas facility in Roosevelt, WA and conducting hydrogen/natural gas blend pilot tests at its Georgetown Training Facility and Tacoma Operating Base. As with electricity, the Proposed Code should reflect that the carbon intensity of gas, will decrease over time.

Thank you for the opportunity to comment on the Council's Proposed Code. We look forward to continue to work with the Council to continue to protect Washingtonians today and in the future.

Sincerely,

A handwritten signature in cursive script, reading "Lorna Luebbe". The signature is written in dark ink and is positioned above a horizontal line.

Lorna Luebbe
Deputy General Counsel/Vice President Sustainability
Puget Sound Energy